



COMDTPUB P16700.4  
NVIC 5-00  
July 21, 2000

NAVIGATION AND VESSEL INSPECTION CIRCULAR NO. 5-00

Subj: GUIDANCE ON PERFORMANCE MEASURES FOR ASSESSING MERCHANT MARINER PROFICIENCY IN BASIC SAFETY UNDER THE INTERNATIONAL CONVENTION ON STANDARDS OF TRAINING, CERTIFICATION AND WATCHKEEPING FOR SEAFARERS, 1978, AS AMENDED

- Ref: (a) International Convention on Standards of Training, Certification and Watchkeeping for Seafarers, 1978, as amended (STCW), including the Seafarers' Training, Certification and Watchkeeping Code (STCW Code)  
(b) Federal Register Vol. 62, No. 123, pg. 34505, dated June 26, 1997, Docket No. CGD 95-062, "Interim Rule: Implementation of the 1995 STCW Amendments  
(c) Federal Register Vol. 64, No. 29, pg. 7227, dated February 12, 1999, Docket No. USCG-1999-5080, International Convention on Standards of Training, Certification and Watchkeeping for Seafarers, 1978, as amended (STCW); Development of National Performance Measures for Evaluating Mariner Competence  
(d) Basic Safety Training Performance Measures, Docket No. USCG-1999-5080-2, Available: <http://dms.dot.gov>

1. **PURPOSE.** This Circular provides guidance on performance measures, or national assessment guidelines, used to assess seafarers' proficiency in programs in Basic Safety Training (BST) approved by the Coast Guard and meeting requirements of the 1995 amendments to reference (a) and the implementing regulations of reference (b).
2. **ACTION.** Officers in Charge, Marine Inspection (OCMIs), should use this Circular when evaluating a mariner requesting an endorsement attesting proficiency in skills sharpened by BST. OCMIs should also bring this Circular to the attention of the appropriate people in the maritime industry within their zones.
3. **DIRECTIVES AFFECTED.** National Maritime Center (NMC) Policy Letter No. 5-99, "Proof of Completion of Basic Safety Training (BST)", is cancelled.

DISTRIBUTION – SDL No. 137

	a	b	c	d	e	f	g	h	i	j	k	l	m	n	o	p	q	r	s	t	u	v	w	x	y	z
A																										
B	*	2	2											30												1
C					*								*													
D											1	*														
E														1	2											
F																										
G																										
H																										

NON-STANDARD DISTRIBUTION: See Page 3

4. BACKGROUND.

- a. Regulations require that mariners who commence training or sea service on or after August 1, 1998, or those renewing their licenses or documents for any service on or after February 1, 2002, must demonstrate proficiency enhanced by BST to qualify for an endorsement of the appropriate credential(s) under the International Convention on Standards of Training, Certification and Watchkeeping for Seafarers, 1978, as amended (STCW). The regulations require practical demonstration of skills in the presence of a Designated Examiner (DE). Unless a mariner demonstrates proficiency in basic safety, the OCMI will issue only a limited endorsement.
- b. The guidance from the International Maritime Organization (IMO) on shipboard assessments of proficiency suggests that administrations should develop standards and measures of performance for practical tests as part of a program of training and assessment of mariners. Since there is a large number of mariners whom many different DEs will assess through a large number of training providers, national assessment guidelines are necessary to ensure standardization, fairness, and consistency.
- c. The Coast Guard tasked the Merchant Marine Personnel Advisory Committee (MERPAC) to develop recommendations for proposed national assessment criteria on BST [see reference (c)]. It solicited public comment on the recommendations of MERPAC [see reference (d)]. It incorporated changes suggested in this feedback into the national assessment guidelines [see enclosure (1)].

5. DISCUSSION.

- a. All mariners with duties to advance safety or pollution prevention must produce evidence of having achieved, or maintained at 5-year intervals, proficiency in BST. STCW training programs submitted to the Coast Guard for approval must provide assessment guidelines or performance measures used to assess mariners' proficiency. The Coast Guard has developed national assessment guidelines for standardizing assessments of mariners in the four elements of BST mandated by the STCW Code. These elements are --
  1. Personal Survival Techniques;
  2. Fire Prevention and Fire-Fighting;
  3. Elementary First Aid; and
  4. Personal Safety and Social Responsibility.
- b. The enclosed performance measures will serve as guidelines for mariners and persons assessing the proficiency of mariners undergoing BST. The Coast Guard recommends using them for assessing proficiency in BST. Individuals and institutions assessing the proficiency of mariners may refine these published guidelines and develop innovative

NAVIGATION AND VESSEL INSPECTION CIRCULAR NO. 5-00

alternatives. They should, however, submit deviations from these guidelines to the NMC for approval by the Coast Guard before use.

- c. Persons training and assessing mariners in programs in BST should use the enclosed guidelines when assessing practical demonstrations of proficiency.
- d. Merchant mariners required to demonstrate proficiency in BST should familiarize themselves with the enclosed guidelines.
- e. Maritime training institutions should use the enclosed guidelines for assessments conducted during the course of programs in BST submitted for approval by the Coast Guard.
- f. The Coast Guard welcomes public comment on the appropriateness, effectiveness, and usefulness of the enclosed guidelines with the goal of promoting consistency in the assessments throughout the industry and making improvements, as needed. Submit comments to:

Commanding Officer  
U.S. Coast Guard  
National Maritime Center  
4200 Wilson Blvd., Suite 510  
Arlington, VA 22203-1804



R. C. NORTH  
Assistant Commandant for Marine Safety  
and Environmental Protection

Encl: (1) Performance Measures for STCW Basic Safety Training Proficiencyes

Non-Standard Distribution:

B:a G-MSO(4); G-MOC(4); G-MOA(2); G-MSE(1); G-MSR(1); G-M(1); G-MS(1)

C:e New Orleans (90); Hampton Roads (50); San Francisco (40); Philadelphia, Port Arthur, Honolulu, Puget Sound (35); Miami, Houston, Mobile, Morgan City, Los Angeles/Long Beach (25); Jacksonville, Portland OR, Boston, Portland ME, Charleston, Galveston, Anchorage, Cleveland, Louisville, Memphis, Paducah, Pittsburgh, St. Louis, San Juan, Savannah, Tampa, Chicago, Buffalo, Detroit, Duluth, Milwaukee, San Diego, Juneau, Valdez, Providence, Huntington, Wilmington, Corpus Christi, Toledo, Guam (20).

C:m New York (70); Sturgeon Bay (4); Baltimore (45).

D:l CG Liaison Officer MILSEALIFTCOMD (Code N-7CG) (1).

CG Liaison Officer MARAD (MAR-720.2) (1).

**Assessment Guidelines for TABLE A-VI/1-1**  
**Specification for minimum standard of competency in Personal Survival Techniques**

<b>Column 1</b>  <b>STCW Competence</b>	<b>Column 2</b>  <b>Knowledge, understanding and proficiency</b>	<b>Column 3</b>  <b>Performance Conditions</b>	<b>Column 4</b>  <b>Performance Behavior (Mariner knowledge or action)</b>	<b>Column 5</b>  <b>Performance Standard(s) (Criteria against which performance is measured)</b>
Survive at sea in the event of a ship abandonment	Knowledge of types of emergency situations which may occur	When asked in an approved written examination to identify and describe the types of emergency situations which may occur,	the candidate will identify and describe (or select the answer that identifies and describes) the types of emergency situations that may occur and the hazards or consequences associated with each.	The candidate will identify and describe (or select the answer that identifies and describes) the hazards or consequences associated with the following situations: collision, fire, foundering, grounding, hull failure, catastrophic machinery failure, weather related emergencies.
	Knowledge of types of lifesaving appliances carried on ships	When asked in an approved written examination to identify and describe the types of lifesaving appliances carried on ships,	the candidate will identify and describe (or select the answer that identifies and describes) the types of lifesaving appliances carried on ships.	The candidate will identify and describe (or select the answer that identifies and describes) the following life saving appliances: lifejackets, ring buoys, water lights, lifeboats, life rafts, rescue boats, immersion suits, thermal protective aids, SARTS, EPIRBS.
	Knowledge of equipment carried in survival craft and its use	When asked in an approved written examination to name and describe survival craft equipment and its use,	the candidate will identify and describe (or select the answer that identifies and describes) the types and use of equipment carried in survival craft.	The candidate will identify and describe (or select the answer that identifies and describes) the location, name and use of the following items of equipment: sea painter, storm oil, sea anchor, boat hook, hatchet, bailer, bilge pump, bucket, protective cover, fishing kit, first aid kit, provisions, condensed milk, water desalting kit, jackknife, drinking cup, flashlight, lantern, illuminating oil, matches, life preservers, lifesaving signals table, orange smoke signals, parachute flares, red hand-held distress signals, signaling mirror, compass, gunwale

NAVIGATION AND VESSEL INSPECTION CIRCULAR NO. 5-00

<b>Column 1</b>	<b>Column 2</b>	<b>Column 3</b>	<b>Column 4</b>	<b>Column 5</b>
<b>STCW Competence</b>	<b>Knowledge, understanding and proficiency</b>	<b>Performance Conditions</b>	<b>Performance Behavior (Mariner knowledge or action)</b>	<b>Performance Standard(s) (Criteria against which performance is measured)</b>
				ladder, ditty bag, fire extinguisher, and tool kit.

**Assessment Guidelines for TABLE A-VI/1-1**  
**Specification for minimum standard of competency in Personal Survival Techniques**

<b>Column 1</b>  <b>STCW Competence</b>	<b>Column 2</b>  <b>Knowledge, understanding and proficiency</b>	<b>Column 3</b>  <b>Performance Conditions</b>	<b>Column 4</b>  <b>Performance Behavior (Mariner knowledge or action)</b>	<b>Column 5</b>  <b>Performance Standard(s) (Criteria against which performance is measured)</b>
		Given an actual survival craft or a mock up stocked with an actual equipment inventory of each piece of equipment carried in the survival craft, when asked to demonstrate its use,	the candidate will demonstrate the use of the piece of equipment given.	The candidate will correctly demonstrate the safe and proper sequence for inspection, operation, activation, and deployment for all of the following in the time specified: sea painter (3 minutes); sea anchor (3 minutes); bilge pump (3 minutes); boat hook (3 minutes); water de-salting kit (3 minutes); signaling mirror (3 minutes); distress signals (3 minutes); and simulate the activation of smoke signals (3 minutes); and parachute flares (3 minutes).
		When asked in an approved written examination to identify and describe the use of the equipment carried in survival craft,	the candidate will identify and describe (or select the answer that identifies and describes) the types and use of equipment carried in survival craft.	The candidate will identify and describe (or select the answer that identifies and describes) the use of the following items: heaving line, instruction manual, instruction card, jackknife, floating knife, paddles, inflation pump, sea anchor, bailer, caps, sponges, first aid kit, flashlight, signal mirror and whistle, red parachute flares, hand-held flares, combination flare and smoke distress signals, provisions, water, can openers, drinking cup fishing kit, seasick tablets, repair kit.
	Knowledge of location of personal lifesaving appliances	When asked in an approved written examination to list the location of personal lifesaving appliances,	the candidate will list (or select the answer that lists) the location of personal lifesaving appliances aboard ship.	The candidate will list (or select the answer that lists) the locations of personal lifesaving appliances: bow, bridge, engine

NAVIGATION AND VESSEL INSPECTION CIRCULAR NO. 5-00

<b>Column 1</b>	<b>Column 2</b>	<b>Column 3</b>	<b>Column 4</b>	<b>Column 5</b>
<b>STCW Competence</b>	<b>Knowledge, understanding and proficiency</b>	<b>Performance Conditions</b>	<b>Performance Behavior (Mariner knowledge or action)</b>	<b>Performance Standard(s) (Criteria against which performance is measured)</b>
				room, individual rooms, embarkation deck lockers, and survival craft.
	Knowledge of principles concerning survival, including: .1 value of training and drills	When asked in an approved written examination to state the value of training and drills,	the candidate will state (or select the answer that states) the value of training and drills.	The candidate will state (or select the answer that states) the following: “To increase proficiency” and “to increase ability to survive.”
	.2 proper use of personal protective clothing and equipment	When asked in an approved written examination to describe the importance of a proper head cover, layers of clothing, and woolen or insulating clothing,	the candidate will describe (or select the answer that describes) the importance of a proper head cover, layers of clothing, and woolen or insulating clothing.	The candidate will describe (or select the answer that describes) the importance of the following items: a proper head cover, layers of clothing, and woolen or insulating clothing.
	.3 need to be ready for any emergency	When asked in an approved written examination to state the need to be ready for any emergency,	the candidate will state (or select the answer that states) that being ready allows a quick response and will enhance the chances of successfully coping with collision; grounding; fire; hull failure, flooding or sinking; machinery failure; and weather related emergencies.	The candidate will state (or select the answer that states) that being ready allows a quick response and will enhance the chances of successfully coping with collision; grounding; fire; hull failure, flooding or sinking; machinery failure; and weather related emergencies.
	.4 actions to be taken when called to survival craft stations (Response to Abandon Ship signal)	When asked in an approved written examination to list the actions to be taken when called to survival craft stations (Response to Abandon Ship signal),	the candidate will list (or select the answer that lists) the actions to be taken when called to survival craft stations (Response to Abandon Ship signal)..	The candidate will list (or select the answer that lists) all of the following: secure workspace; don a PFD; muster at designated stations; and, carry out duties as assigned on station bill.

**Assessment Guidelines for TABLE A-VI/1-1**  
**Specification for minimum standard of competency in Personal Survival Techniques**

<b>Column 1</b>  <b>STCW Competence</b>	<b>Column 2</b>  <b>Knowledge, understanding and proficiency</b>	<b>Column 3</b>  <b>Performance Conditions</b>	<b>Column 4</b>  <b>Performance Behavior (Mariner knowledge or action)</b>	<b>Column 5</b>  <b>Performance Standard(s) (Criteria against which performance is measured)</b>
	.5 actions to be taken when required to abandon ship	When asked in an approved written examination to list actions to be taken when required to abandon ship via lifeboat and life raft,	the candidate will list (or select the answer that lists) the actions to be taken when required to abandon ship via lifeboat and life raft.	The candidate will list (or select the answer that lists) the following actions to be taken when required to abandon ship via lifeboat and life raft, as follows: (1) for lifeboats: safely loads/boards survival craft; safely lowers survival craft to water; and, activates EPIRB; (2) for life rafts: safely deploys life rafts manually; uses disembarkation ladder to board survival craft, and, activates EPIRB.
	.6 actions to be taken when survival craft is in the water	When asked in an approved written examination to list actions to be taken when the survival craft is in the water,	the candidate will list (or select the answer that lists) the actions to be taken when the survival craft is in the water.	The candidate will list (or select the answer that lists) all of the following actions to be taken when survival craft is in the water: safely release the survival craft; safely recover personnel from vessel and water; and, safely maneuver survival craft away from vessel.
	.7 actions to be taken when aboard a survival craft	When asked in an approved written examination to list, in order of priority, the initial actions to take in a survival craft when its away from the vessel to enhance the chance of survival,	the candidate will list (or select the answer that lists), in order of priority, the initial actions to take aboard a survival craft to enhance the chance of survival.	The candidate will list (or select the answer that lists) all of the following 7 high priority actions: posting a lookout; keeping raft dry; inflating floor; rigging radar reflector; readying distress signals; checking that sea-anchor deployed; and, activating EPIRB.



NAVIGATION AND VESSEL INSPECTION CIRCULAR NO. 5-00

<b>Column 1</b>	<b>Column 2</b>	<b>Column 3</b>	<b>Column 4</b>	<b>Column 5</b>
<b>STCW Competence</b>	<b>Knowledge, understanding and proficiency</b>	<b>Performance Conditions</b>	<b>Performance Behavior (Mariner knowledge or action)</b>	<b>Performance Standard(s) (Criteria against which performance is measured)</b>
	.8 main dangers to survivors	When asked in an approved written examination to list main dangers to survivors,	the candidate will list (or select the answer that lists) the main dangers to survivors.	The candidate will list (or select the answer lists) the following: drowning, hypothermia, conflict resolution, dehydration, starvation, exposure, and marine life.
		When asked in an approved written examination to list actions to be take aboard a survival craft at sea to enhance chances of survival,	the candidate will list (or select the answer that lists) the actions to be taken aboard a survival craft at sea to enhance chances of survival.	The candidate will list (or select the answer that lists) the following actions to be taken aboard a survival craft at sea to enhance chances of survival: (1) establish chain of command; (2) assign tasks, including the following: lookout; signaling/pyrotechnics; radio operator; rationing and supplies; craft maintenance; medical person; (3) rig protective cover or close up raft; (4) check rations; (5) check survival equipment; (6) rig rain collection system; (7) check water lights; (8) utilize thermal protective aids; (9) keep craft in vicinity of EPIRB signal through use of sea-anchor; (10) check VHF radio; activate EPIRB; (11) muster or marshal other survival craft; and, (12) maintain discipline and morale.
		When asked to don a Coast Guard lifejacket,	the candidate will properly don the lifejacket.	The candidate will properly don a lifejacket in 1 minute (All of the following must be met: straps secured; snaps secured; properly fitted and positioned; whistle and light checked).

**Assessment Guidelines for TABLE A-VI/1-1**  
**Specification for minimum standard of competency in Personal Survival Techniques**

<b>Column 1</b>  <b>STCW Competence</b>	<b>Column 2</b>  <b>Knowledge, understanding and proficiency</b>	<b>Column 3</b>  <b>Performance Conditions</b>	<b>Column 4</b>  <b>Performance Behavior (Mariner knowledge or action)</b>	<b>Column 5</b>  <b>Performance Standard(s) (Criteria against which performance is measured)</b>
		When asked to properly put on an immersion suit,	the candidate will properly don an immersion suit.	The candidate will properly don an immersion suit in 2 minutes (All of the following must be met: checks for proper operation of zipper, whistle, and light; dons suit according to manufacturer's recommendations; fully zips suit; and, face flap closed).
		While wearing a life jacket and standing at least 1 meter above the water,	the candidate will jump into the water in the proper position to prevent injury.	The candidate jumps into water doing all of the following: one hand covering mouth and nose; other hand across chest to secure jacket from riding up and coming off, legs straight and tight together or ankles crossed.
		While wearing an immersion suit and standing at least 1 meter above the water,	the candidate will jump into the water in the proper position to prevent injury.	The candidate jumps into water doing all of the following: one hand covering mouth and nose; other hand across chest, legs straight and tight together or ankles crossed.
		While in the water, wearing either a lifejacket or an immersion suit,	the candidate will right an inverted 1-man ocean life raft rated for 6 persons or more.	Within 10 minutes the candidate will successfully complete all of the following: swim to side with CO <sub>2</sub> bottle; climb aboard; grab righting straps on side opposite CO <sub>2</sub> bottle; stand on or straddle bottle; lean back holding onto righting straps and right raft; swims clear of raft.
		While in the water wearing a life jacket,	the candidate will swim.	The candidate swims at least 20 feet.

NAVIGATION AND VESSEL INSPECTION CIRCULAR NO. 5-00

<b>Column 1</b>	<b>Column 2</b>	<b>Column 3</b>	<b>Column 4</b>	<b>Column 5</b>
<b>STCW Competence</b>	<b>Knowledge, understanding and proficiency</b>	<b>Performance Conditions</b>	<b>Performance Behavior (Mariner knowledge or action)</b>	<b>Performance Standard(s) (Criteria against which performance is measured)</b>
		In water, without either a life jacket or an immersion suit,	the candidate will keep afloat.	The candidate remains afloat for 1 minute.
		From a height at least 1 meter above the water, wearing either a life jacket or an immersion suit, and given a covered life raft in the water,	the candidate will safely jump into the life raft.	The candidate correctly performs all of the following: safety checks before jumping; ensures landing spot in raft is clear by using audible or visual means; checks that immediate area of raft is clear of debris; jumps using proper technique (keeps feet together with knees slightly bent); jumps through canopy opening.
		In the water, wearing either a life jacket or an immersion suit and given a covered life raft having a boarding height of not less than 1/2 meter nor more than 1 meter,	the candidate safely boards the life raft unassisted from the water.	The candidate correctly demonstrates all of the following: swim to boarding ramp; grab boarding straps; kick legs while pulling self into raft; board raft.
		In a lifeboat, life raft or a training device that replicates a lifeboat or life raft, and given a packed sea anchor or a training device that replicates a sea anchor,	the candidate will demonstrate the unpacking, rigging, deployment and checking for fouled deployment of the main lifeboat sea anchor, or the main and spare life raft sea anchor.	For a lifeboat, the candidate must, in the following order, locate the sea-anchor; unpack it; secure a line to the sea-anchor bridle; secure the drag and trip lines to a strong point at the bow of the life boat; and, deploy the sea-anchor; or, for a life raft, the candidate must, in the following order, locate the instructions to deploy sea anchor, follow instructions to deploy life raft sea anchor; check sea anchor to see if it is fouled, simulate attempt to clear fouled sea anchor; simulate cutting away fouled sea-anchor; securing spare sea-anchor drag and trip lines to appropriate attachment location on raft; and, deploy the spare sea-anchor.
		Given an orange smoke grenade, a red	the candidate will simulate the proper	The candidate will correctly simulate the

**Assessment Guidelines for TABLE A-VI/1-1**  
**Specification for minimum standard of competency in Personal Survival Techniques**

<b>Column 1</b>  <b>STCW Competence</b>	<b>Column 2</b>  <b>Knowledge, understanding and proficiency</b>	<b>Column 3</b>  <b>Performance Conditions</b>	<b>Column 4</b>  <b>Performance Behavior (Mariner knowledge or action)</b>	<b>Column 5</b>  <b>Performance Standard(s) (Criteria against which performance is measured)</b>
		parachute flare, and a red hand held flare,	method to safely activate each device.	proper method to activate each device in 2 minutes, by doing all of the following for each: holding the device a safe distance downwind from persons and survival craft; activating by using the activation device; and for the orange smoke device, throwing into water downwind after activation.
		Given a hand held portable VHF radio, and given an emergency scenario or the order to communicate by radio with approaching rescuers,	the candidate will simulate operating the controls of a portable VHF radio to properly communicate with approaching rescuers.	The candidate will correctly demonstrate all of the following operations, features and controls: turning radio on; adjusting volume; adjusting squelch; operating switch to transmit; and, the candidate will simulate the broadcast of the appropriate message for the scenario given or communicate with approaching rescuers.
		Given an EPIRB set in the “test” mode,	the candidate will simulate activating the EPIRB.	The candidate will correctly simulate activating the EPIRB in less than 1 minute.
		Given an SART set in the “test” mode,	the candidate will activate the SART.	The candidate will correctly demonstrate all of the following: rig, activate, and hold or mount the SART equipment at highest point possible in craft.

**Assessment Guidelines for TABLE A-VI/1-2**  
**Specification for minimum standard of competency in Fire Prevention and Fire Fighting**

<b>Column 1</b>  <b>STCW Competence</b>	<b>Column 2</b>  <b>Knowledge, understanding and proficiency</b>	<b>Column 3</b>  <b>Performance Conditions</b>	<b>Column 4</b>  <b>Performance Behavior (Mariner knowledge or action)</b>	<b>Column 5</b>  <b>Performance Standard(s) (Criteria against which performance is measured)</b>
Minimize the risk of fire and maintain a state of readiness to respond to emergency situations involving fire	Shipboard fire fighting organization	When asked in an approved written examination to list the various positions and duties of the ship fire fighting organization,	the candidate will list (or select the answer that lists) the various positions and duties of the ship fire fighting organization.	<p>The candidate will list (or select the answer that lists) the following positions and duties:</p> <p>Master / Officer in Charge -- person in overall charge of the fire fighting;</p> <p>On Scene Leader / Officer in Charge at the scene -- person in charge at the actual fire scene;</p> <p>Hose Team Leader (if appropriate)-- person in charge of the hose team;</p> <p>Nozzleman -- directs the stream and chooses the stream pattern;</p> <p>Back-up man -- takes up the nozzle reaction pressure and helps move the hose;</p> <p>Crewmember -- duties as assigned.</p>
	Location of fire fighting appliances and emergency escape routes	When given a set of a ship's fire plans and asked in an approved written examination to identify the locations of fire fighting appliances and trace certain escape routes,	the candidate will identify (or select the answer that identifies) the locations of fire fighting appliances and trace (or select the answer that traces) the escape routes from spaces identified on the plan.	The candidate will identify (or select the answer that identifies) the locations of fire fighting appliances on the plan; and trace (or select the answer that traces) the escape routes and identifies the most direct escape routes from the locations given, which will minimally include: the bridge, a crew mess area, the engine room, a passenger or crew stateroom, a workspace forward, a workspace aft, and a cargo area.
	The elements of fire and	When asked in an approved written	the candidate will list and state (or select	The candidate will list and states (or select

**Assessment Guidelines for TABLE A-VI/1-2**  
**Specification for minimum standard of competency in Fire Prevention and Fire Fighting**

<b>Column 1</b>  <b>STCW Competence</b>	<b>Column 2</b>  <b>Knowledge, understanding and proficiency</b>	<b>Column 3</b>  <b>Performance Conditions</b>	<b>Column 4</b>  <b>Performance Behavior (Mariner knowledge or action)</b>	<b>Column 5</b>  <b>Performance Standard(s) (Criteria against which performance is measured)</b>
	explosion	examination to list and state the significance of the four sides of the fire tetrahedron or the three sides of the fire triangle,	the answer that lists and states) the significance of the four sides of the fire tetrahedron or the three sides of the fire triangle.	the answer that lists and states) heat, oxygen, fuel and chemical chain reaction as the sides of the fire tetrahedron, or heat, oxygen, and fuel as the sides of the fire triangle, and that all of these components are necessary for a fire to occur and that the removal of any one component will cause the fire to be extinguished.
	Types and sources of ignition	When asked in an approved written examination to list the major sources of ignition aboard ship, and describe precautions to be taken for each,	the candidate will list (or select the answer that lists) the 8 major sources of ignition aboard ship, and describe (or select the answer that describes) precautions to be taken for each.	The candidate will list (or select the answer that lists) the following major sources: smoking materials, spontaneous ignition, electrical equipment, galley operations, welding and burning, fuel oil transfer and service operations, tanker loading and discharging, and collisions; and describe (or select the answer that describes) the precautions to be taken for each.
	Flammable materials, fire hazards, and spread of fire	When asked in an approved written examination to list examples of flammable materials for each of the three physical states,	the candidate will list (or select the answer that lists) examples of flammable materials for each of the three physical states.	The candidate will list (or select the answer that lists) at least 2 examples of solid, liquid, or gas flammable materials.
		When asked in an approved written examination to list examples of common fire hazards, and describe precautions to be taken for each,	the candidate will list (or select the answer that lists) examples of common fire hazards, and describe(or select the answer that describes)precautions to be taken for each.	The candidate will list (or select the answer that lists) examples of complacency about fire safety on the job, careless disposal of smoking materials, defective electrical components, spillage of flammable materials, and careless work habits; and describes (or selects the

NAVIGATION AND VESSEL INSPECTION CIRCULAR NO. 5-00

Column 1  STCW Competence	Column 2  Knowledge, understanding and proficiency	Column 3  Performance Conditions	Column 4  Performance Behavior (Mariner knowledge or action)	Column 5  Performance Standard(s) (Criteria against which performance is measured)
				answer that describes) precautions to be taken for each.
		When asked in an approved written examination to list and describe the methods of fire spread,	the candidate will list and describe (or select the answer that lists and describes) the methods of fire spread.	The candidate will list and describe (or select the answer that lists and describes) the following 3 methods of fire spread: conduction – heat through a solid; convection - heat transfer by fluid motion; radiation – heat transfer by electro-magnetic or radiant energy propagation.
	The need for constant vigilance	When asked in an approved written examination to state the need for constant vigilance,	the candidate will state (or select the answer that states) why constant vigilance is needed.	The candidate will state (or select the answer that states): “constant vigilance is needed to prevent the loss of life and damage to the ship and the environment from fire.”
	Actions to be taken upon discovery of fire on board ship	When asked in an approved written examination to state the actions to be taken upon discovery of fire on board ship,	the candidate will state (or select the answer that states) the actions to be taken upon discovery of fire on board ship.	The candidate will state (or select the answer that states) all the following actions: sound the alarm; accurately report the location, type and size of fire; actions taken so far, and; attempt to confine the fire.
	Fire and smoke detection, and automatic alarm systems	When asked in an approved written examination to describe the procedure for locating the space in which a smoke, heat or flame detector has been activated and acknowledging the alarm signal,	the candidate will describe (or select the answer that describes) the procedure for locating the space in which a smoke, heat or flame detector has been activated and acknowledging the alarm signal.	The candidate will describe (or select the answer that describes) the procedure for locating the space in which a smoke, heat or flame detector has been activated and acknowledging the alarm signal.
		When asked in an approved written examination to describe the procedure for locating the space in which an automatic sprinkler has been activated,	the candidate will describe (or select the answer that describes) the procedure for locating the space in which an automatic sprinkler has been activated.	The candidate will describe (or select the answer that describes) the procedure for locating the space in which an automatic sprinkler has been activated.
		When asked in an approved written examination to describe the signal and list the actions to be taken when the CO <sub>2</sub> flooding alarm is sounded,	the candidate will describe (or select the answer that describes) the signal and list (or selects the answer that lists) the actions to be taken when the CO <sub>2</sub> flooding alarm is sounded.	The candidate will describe (or select the answer that describes) the signal and list (or selects the answer that lists) all actions to be taken when the CO <sub>2</sub> flooding alarm is sounded.
	Classification of fire and	When asked in an approved written	the candidate will list and define (or select	The candidate will list and define (or

**Assessment Guidelines for TABLE A-VI/1-2**  
**Specification for minimum standard of competency in Fire Prevention and Fire Fighting**

<b>Column 1</b>  <b>STCW Competence</b>	<b>Column 2</b>  <b>Knowledge, understanding and proficiency</b>	<b>Column 3</b>  <b>Performance Conditions</b>	<b>Column 4</b>  <b>Performance Behavior (Mariner knowledge or action)</b>	<b>Column 5</b>  <b>Performance Standard(s) (Criteria against which performance is measured)</b>
	applicable extinguishing agents	examination to list and define the classes of fire,	the answer that lists and defines) the classes of fire.	select the answer that lists and defines) four classes of fire: Class A - combustible solids; Class B - combustible and flammable liquids and gases; Class C - energized electrical equipment; Class D - combustible metals.
		When asked in an approved written examination to list extinguishing agents and name the classes of fire for which they are effective,	the candidate will list (or select the answer that lists) extinguishing agents and names ( or selects the answer that names) the classes of fire for which they are effective.	The candidate will list (or select the answer that lists) extinguishing agents and names ( or selects the answer that names) the following extinguishing agents and name at least one of the classes of fire for which they are effective: Water - normally used on Class A (ordinary combustibles) materials; Steam – normally for Class A and Class B fires; Foam - normally used on Class B fires; Carbon dioxide (CO <sub>2</sub> ) – usually used on Class B and C fires; Dry chemical – Class B and C and sometimes Class A; Dry powder - Class D only; Halon™ or Halon™ alternative agents - Class B and C.
Fight and extinguish fires	Fire fighting equipment and its location on	When asked in an approved written examination to list the safety procedures	the candidate will list (or select the answer that lists) the safety procedures to	The candidate will list (or select the answer that lists) the following safety



NAVIGATION AND VESSEL INSPECTION CIRCULAR NO. 5-00

Column 1  STCW Competence	Column 2  Knowledge, understanding and proficiency	Column 3  Performance Conditions	Column 4  Performance Behavior (Mariner knowledge or action)	Column 5  Performance Standard(s) (Criteria against which performance is measured)
	board: .1 Fixed installations	to be utilized when a fixed fire fighting system is to be employed,	be utilized when a fixed fire fighting system is to be employed.	procedures to be utilized when a fixed fire fighting system is to be employed: Ensure: (1) proper authorization has been granted to use the system; (2) only trained personnel should operate the system; (3) a complete crew muster must be taken; and, (4) all crewmembers must be instructed in the evacuation procedures to be taken when the alarm is activated.
	.2 Fire fighter's outfit	When given a complete fire fighter's outfit and asked to demonstrate the proper donning procedure,	the candidate will demonstrate the proper donning procedure for the fire fighter's outfit.	The candidate will demonstrate proper donning of all the following equipment in 3 minutes: Nomex™ hood, turnout pants and boots, turnout coat, helmet; gloves, and eye protection.
		When asked in an approved written examination to list the dangers / limitations of a fire fighter's outfit,	the candidate will list (or select the answer that lists) the dangers / limitations of a fire fighter's outfit.	The candidate will list (or select the answer that lists) the following: temperature rating of the outfit; tendency to induce heat exhaustion; and, decrease in mobility / dexterity.
	.3 Personal equipment	When asked in an approved written examination to list personal equipment carried during fire fighting operations and describe their use,	the candidate will list (or select the answer that lists and describes) personal equipment carried during fire fighting operations and describe their use.	The candidate will list (or select the answer that lists and describes) the following personal equipment carried during fire fighting operations and describe their use: PASS device; Personal atmospheric meters; Flash light; Life line.
	.4 Fire fighting	When asked in an approved written	the candidate will list and describe the use	The candidate will list and describe the

**Assessment Guidelines for TABLE A-VI/1-2**  
**Specification for minimum standard of competency in Fire Prevention and Fire Fighting**

<b>Column 1</b>  <b>STCW Competence</b>	<b>Column 2</b>  <b>Knowledge, understanding and proficiency</b>	<b>Column 3</b>  <b>Performance Conditions</b>	<b>Column 4</b>  <b>Performance Behavior (Mariner knowledge or action)</b>	<b>Column 5</b>  <b>Performance Standard(s) (Criteria against which performance is measured)</b>
	equipment and appliances	examination to list fire fighting equipment most typically used during fire fighting operations and describe their use,	(or select the answer that list and describes the use) of fire fighting equipment most typically used during fire fighting operations.	use (or select the answer that list and describes the use) of the following items of fire fighting equipment most typically used during fire fighting operations and describe their use: Ax Spanner wrench Other hand tools.
	.	When asked in an approved written examination to list commonly used fire fighting appliances and state their purpose,	the candidate will list and state the purpose (or select the answer that lists and states the purpose) of commonly used fire fighting appliances.	The candidate will list and state the purpose (or select the answer that lists and states the purpose) of the following commonly used fire fighting appliances: gated wye; reducer; adapter; nozzle (variable stream or high velocity fog & applicator); and, monitor.
	.5 Fire fighting methods	When told the name of each of the 2 methods (strategies) of fire fighting and asked in an approved written examination to describe their objective,	the candidate will describe (or select the answer that describes) the objectives of the 2 methods (strategies) of fire fighting.	The candidate will describe (or select the answer that describes) the 2 methods (strategies) of fire fighting by stating the descriptive phrases for each method: Defensive – (1) objective is confinement, and (2) is accomplished by doing closures and boundary cooling Offensive - (1) objective is extinguishment, and (2) is accomplished by applying extinguishing agent onto the fire either as a direct attack or indirect attack.

NAVIGATION AND VESSEL INSPECTION CIRCULAR NO. 5-00

Column 1  STCW Competence	Column 2  Knowledge, understanding and proficiency	Column 3  Performance Conditions	Column 4  Performance Behavior (Mariner knowledge or action)	Column 5  Performance Standard(s) (Criteria against which performance is measured)
	.6 Fire fighting agents	When asked in an approved written examination to list the various fire fighting agents and state how they extinguish fires,	the candidate will list (or select the answer that lists) the various fire fighting agents; and state (or select the answer that states) how they extinguish fire.	The candidate will list (or select the answer that lists) the various fire fighting agents; and state (or select the answer that states) how they extinguish fire as follows: Water - cooling Steam - cooling and smothering Foam - smothering Carbon Dioxide – smothering Dry Chemical – smothering and chemical chain breaking Dry Powder – smothering Halon™ or Halon™ alternative agents – chemical chain breaking.
	.7 Fire fighting procedures	When presented with a small fire in each class, given a selection of Class A through D (water, CO <sub>2</sub> , foam, dry chemical, and dry powder, etc.) fire extinguishers and asked to demonstrate the fire fighting procedures for a small (incipient) fire (this exercise is conducted 4 times; once for each class of fire),	the candidate will demonstrate the fire fighting procedures for small (incipient) fires for each class of fire.	For each class of fire, the candidate will correctly demonstrate fire fighting procedures for a small fire by doing all of the following: selecting proper class fire extinguisher, employing safe tactics (standing upwind), and making effective application of agent (aimed at base of flames; for foam, building up blanket) to fully extinguish the fire before agent is exhausted.
	.8 Use of breathing apparatus for fighting fires and effecting rescues	When dressed in a fire fighter's outfit (without gloves on), given a self-contained breathing apparatus and asked to demonstrate one of the proper donning methods for self-contained breathing apparatus,	the candidate will demonstrate one of the proper donning methods for self-contained breathing apparatus.	The candidate will demonstrate the proper donning of a self-contained breathing apparatus in 1 minute using one of the following methods: (1) off the wall; (2) partner assist (must demonstrate both roles: assisting and being assisted); (3) coat swing; or, (4) over the head, and

**Assessment Guidelines for TABLE A-VI/1-2**  
**Specification for minimum standard of competency in Fire Prevention and Fire Fighting**

<b>Column 1</b>	<b>Column 2</b>	<b>Column 3</b>	<b>Column 4</b>	<b>Column 5</b>
<b>STCW Competence</b>	<b>Knowledge, understanding and proficiency</b>	<b>Performance Conditions</b>	<b>Performance Behavior (Mariner knowledge or action)</b>	<b>Performance Standard(s) (Criteria against which performance is measured)</b>
				achieve a proper fit of the unit with no loose or incorrect strap connections.
		While wearing a fire fighter's outfit (wearing gloves) and with a self-contained breathing apparatus donned, when asked to demonstrate proper use of the apparatus under normal and emergency conditions,	the candidate will demonstrate proper use of the breathing apparatus under normal and emergency conditions.	The candidate will correctly demonstrate all of the following: (1) normal breathing; (2) changing the bottle; and (3) emergency breathing.
		When presented with an extensive fire (not less than 750 kw) with heavy smoke in an enclosed space (not less than 1400 cu ft nor more than 9000 cu ft), given jet and spray nozzles on a charged hose line, wearing a fire fighter's outfit and a properly donned self-contained breathing apparatus, and asked to demonstrate the hose team leader procedures to extinguish the fire,	the candidate will demonstrate the proper hose team leader procedures for extinguishing extensive fires.	The candidate will correctly demonstrate all of the following hose team leader procedures for extinguishing an extensive: selecting proper nozzle settings and advancing the hose line, employing safe tactics (crouching low and approaching from upwind or with a clear exit path), making effective application of water streams (circular motion of nozzle; cooling ceiling first) and finally, extinguishing seat of fire.
		When presented with smoke-filled space, wearing a fire fighter's outfit and a properly donned self-contained breathing apparatus, and asked to effect a rescue	the candidate will demonstrate the proper procedures for effecting a rescue.	The candidate will correctly demonstrate procedures for effecting a rescue by doing all of the following: conducting a search that is thorough and has a pattern; locating and removing a 165-pound rescue mannequin.

NAVIGATION AND VESSEL INSPECTION CIRCULAR NO. 5-00

<b>Column 1</b>	<b>Column 2</b>	<b>Column 3</b>	<b>Column 4</b>	<b>Column 5</b>
<b>STCW Competence</b>	<b>Knowledge, understanding and proficiency</b>	<b>Performance Conditions</b>	<b>Performance Behavior (Mariner knowledge or action)</b>	<b>Performance Standard(s) (Criteria against which performance is measured)</b>
Take immediate action upon encountering an accident or other medical emergency	Assessment of needs of casualties and threats to own safety	When asked in an approved written examination to state the importance of body substance isolation,	the candidate will state (or select the answer that states) the importance of body substance isolation.	The candidate will state (or select the answer that states) that “body substance isolation reduces the health threat to emergency and medical personnel.”
		When asked in an approved written examination to list body substance barrier devices,	the candidate will list (or select the answer that lists) body substance barrier devices.	The candidate will list (or select the answer that lists) the following barrier devices: gloves, masks, goggles and resuscitation masks.
		When asked in an approved written examination to identify 4 scene safety hazards,	the candidate will identify (or select the answer that identifies) 4 scene safety hazards.	The candidate will identify (or select the answer that identifies) the following scene safety hazards: environmental, electrical, fire and hazardous materials.
		When asked in an approved written examination what to do when a medical or trauma emergency is suspected,	the candidate will state (or select the answer that states) what is to be done when a medical or trauma emergency is suspected.	The candidate will state (or select the answer that states) that help should be called whenever a medical or trauma emergency is suspected.
		When asked in an approved written examination to describe patient assessment procedures in correct order,	the candidate will describe (or select the answer that describes) patient assessment procedures in correct order.	The candidate will describe (or select the answer that describes) all of the following patient assessment procedures in the following order: responsiveness (by verbal communication, touching or checking pupil dilation), airway (by listening and feeling), breathing (by listening, feeling and observing), pulse (by feeling), and bleeding (by observing).
	Knowledge of body structure and function	When given a body chart and asked to identify the basic components and describe function of each major body system when named,	the candidate will identify and describe (or select the answer that identifies and describes) the basic components and function of each named major body system.	For each major body system (respiratory, circulatory, lymphatic, nervous, musculoskeletal, integumentary, digestive, endocrine and genito-urinary), the candidate will identify and describe (or select the answer that identifies and describes) the system’s basic function.

**Assessment Guidelines for TABLE A-VI/1-3**  
**Specification for minimum standard of competency in Elementary First Aid**

<b>Column 1</b>  <b>STCW Competence</b>	<b>Column 2</b>  <b>Knowledge, understanding and proficiency</b>	<b>Column 3</b>  <b>Performance Conditions</b>	<b>Column 4</b>  <b>Performance Behavior (Mariner knowledge or action)</b>	<b>Column 5</b>  <b>Performance Standard(s) (Criteria against which performance is measured)</b>
	Knowledge of immediate measures to take in cases of emergency, including the ability to:  .1 position the casualty	When asked in an approved written examination to list the reasons for not changing the position of a patient,	the candidate will list (or select the answer that lists) the reasons for not changing the position of a patient.	The candidate will list (or select the answer that lists) the reason or reasons for not changing the position of a patient: possibility of causing further injury or aggravating other internal injuries; and, possibility of the existence of a spinal cord injury.
		When asked in an approved written examination to list the reasons for changing the position of a patient,	the candidate will list (or select the answer that lists) the reasons for positioning a patient.	The candidate will list (or select the answer that lists) the reason or reasons for positioning a patient: to eliminate airway obstruction; to alter level of consciousness to recovery position; and, as part of shock management.
	.2 apply resuscitation techniques	Given a resuscitation mannequin, when asked to demonstrate determining whether resuscitation is required,	the candidate will use the resuscitation mannequin to demonstrate determining whether resuscitation is required.	The candidate will use the resuscitation mannequin to demonstrate determining whether resuscitation is required by doing all of the following in 30 seconds or less in the order stated: call out to the individual, gently shake the individual, assess the response in each case, and then, if no response, call for help.

NAVIGATION AND VESSEL INSPECTION CIRCULAR NO. 5-00

<b>Column 1</b>	<b>Column 2</b>	<b>Column 3</b>	<b>Column 4</b>	<b>Column 5</b>
<b>STCW Competence</b>	<b>Knowledge, understanding and proficiency</b>	<b>Performance Conditions</b>	<b>Performance Behavior (Mariner knowledge or action)</b>	<b>Performance Standard(s) (Criteria against which performance is measured)</b>
		Given a resuscitation mannequin, when asked to demonstrate the opening of the airway and checking for breathing,	the candidate will demonstrate the opening of the airway and checking for breathing.	The candidate will in 1 minute or less correctly use the resuscitation mannequin to demonstrate the opening of the airway and checking for breathing by doing both of the following: administering the modified jaw thrust or the head-tilt/chin-lift, and listening and feeling for breathing.
		When asked in an approved written examination to describe procedures for two-person CPR,	the candidate will list (or select the answer that lists) the proper procedures for two-person CPR.	The candidate will list (or select the answer that lists) the proper procedures for two-person CPR, including determining whether resuscitation is required, opening the airway and checking for breathing and pulse, proper hand placements, proper compressions and ventilations.
		Given a resuscitation mannequin, and told to take the appropriate action for an unresponsive person who is not breathing,	the candidate will demonstrate the proper action to take for an unresponsive person who is not breathing	The candidate will use the resuscitation mannequin to demonstrate the proper action by immediately providing 2 ventilations (mouth-to-mouth or mouth-to-nose or mouth-to-barrier device), achieving good chest rise and taking 1-1/2 to 2 seconds each.
		Given a resuscitation mannequin, and asked to demonstrate the procedure for determining if a patient has a pulse,	the candidate will demonstrate the procedure for determining if a patient has a pulse.	The candidate will use the resuscitation mannequin to correctly demonstrate the procedure for determining if a patient has a pulse by checking the carotid artery pulse for 5 to 10 seconds.
		Given a resuscitation mannequin, and asked to demonstrate proper hand placements for chest compressions,	the candidate will demonstrate proper hand placements for chest compressions.	The candidate will use the resuscitation mannequin to demonstrate proper hand placements for chest compressions, ensuring all of the following: compression site is two finger widths above xiphoid process, heel of hand is on sternum with other hand on top, and fingers are off ribs.

**Assessment Guidelines for TABLE A-VI/1-3**  
**Specification for minimum standard of competency in Elementary First Aid**

<b>Column 1</b>  <b>STCW Competence</b>	<b>Column 2</b>  <b>Knowledge, understanding and proficiency</b>	<b>Column 3</b>  <b>Performance Conditions</b>	<b>Column 4</b>  <b>Performance Behavior (Mariner knowledge or action)</b>	<b>Column 5</b>  <b>Performance Standard(s) (Criteria against which performance is measured)</b>
		Given a resuscitation mannequin, when asked to demonstrate proper CPR compressions for 2 minutes,	the candidate will demonstrate proper CPR compressions for 2 minutes.	The candidate will use the resuscitation mannequin to demonstrate proper CPR compressions for 2 minutes, ensuring all of the following: cycles of 15 compressions followed by 2 slow ventilations are maintained, compressions are administered at a rate of 80 - 100 compressions per minute, compression depths are 1½ to 2 inches, and the patient is reassessed for breathing and pulse after the fourth cycle.
	Two person  Entrance of second rescuer	Given a resuscitation mannequin with one candidate performing one person CPR, when asked to perform two person CPR,	the second candidate will take over proper CPR compressions for 2 minutes while the first candidate maintains proper ventilations; after two minutes, the candidates will switch positions and continue two person CPR.	The candidates will use the resuscitation mannequin to demonstrate proper two person CPR compressions and for 2 minutes, ensuring all of the following: cycles of 5 compressions followed by 1 slow ventilation are maintained, compressions are administered at a rate of 80 - 100 compressions per minute, compression depths are 1½ to 2 inches, and the patient is reassessed for breathing and pulse after the fourth cycle.
		Given a resuscitation mannequin, when asked to demonstrate proper actions for a conscious adult with a foreign body airway blockage,	the candidate will demonstrate proper actions for a conscious adult with a foreign body airway blockage.	The candidate will use the resuscitation mannequin to correctly demonstrate proper actions for a conscious adult with a foreign body airway blockage by doing all of the following: asking, "Are you choking?" and if the response is affirmative, giving abdominal or chest thrusts, using proper hand placement, until effective or victim becomes unconscious.



NAVIGATION AND VESSEL INSPECTION CIRCULAR NO. 5-00

Column 1  STCW Competence	Column 2  Knowledge, understanding and proficiency	Column 3  Performance Conditions	Column 4  Performance Behavior (Mariner knowledge or action)	Column 5  Performance Standard(s) (Criteria against which performance is measured)
		Given a resuscitation mannequin, when asked to demonstrate the proper series of actions for an adult with a foreign body airway blockage and slipping into an unconscious state,	the candidate will demonstrate the proper series of actions for an unconscious adult with a foreign body airway blockage until attempts are successful.	The candidate will use the resuscitation mannequin to correctly demonstrate the proper series of actions for an unconscious adult with a foreign body airway blockage by doing all of the following until attempts are successful: establishes patient's unresponsiveness; calls for help; opens airway by using head-tilt/chin lift; attempts to ventilate; when told 1 <sup>st</sup> attempt is unsuccessful, repositions head and attempts to ventilate a 2 <sup>nd</sup> time; when told 2 <sup>nd</sup> attempt is unsuccessful and victim is unconscious, performs up to 5 abdominal or chest thrusts using proper hand placement; performs tongue-jaw lift and finger sweep; repeats repositioning of the head and ventilation attempts until told attempts are successful.
	.3 control bleeding	Given a rescue mannequin with a bleeding injury simulated or described and asked to demonstrate proper bleeding control techniques, taking into consideration the location and severity of the injury,	the candidate will use the rescue mannequin with a simulated or described bleeding injury to demonstrate proper bleeding control techniques, taking into consideration the location and severity of the injury.	Using the rescue mannequin, the candidate will correctly demonstrate proper bleeding control techniques, taking into consideration the location and severity of the injury, by doing the following: applying direct pressure; elevating the extremity; and applying pressure at the appropriate pressure point.
	.4 apply appropriate measures of basic shock management	When asked in an approved written examination to identify the signs and symptoms of shock development,	the candidate will identify (or select the answer that identifies) the signs and symptoms of shock development.	The candidate will identify (or select the answer that identifies) the following sets of signs and symptoms of shock development: (1) rapid and shallow respiration; (2) thirst, nausea and vomiting; (3) weak and rapid pulse; and (4) restlessness, excitement and anxiety.

**Assessment Guidelines for TABLE A-VI/1-3**  
**Specification for minimum standard of competency in Elementary First Aid**

<b>Column 1</b>  <b>STCW Competence</b>	<b>Column 2</b>  <b>Knowledge, understanding and proficiency</b>	<b>Column 3</b>  <b>Performance Conditions</b>	<b>Column 4</b>  <b>Performance Behavior (Mariner knowledge or action)</b>	<b>Column 5</b>  <b>Performance Standard(s) (Criteria against which performance is measured)</b>
		When asked in an approved written examination to describe the position for a patient in shock that does not have an injury to the spine or a lower extremity,	the candidate will describe (or select the answer that describes) the position for a patient in shock that does not have an injury to the spine or a lower extremity.	The candidate will describe (or select the answer that describes) the position for a shock patient that does not have an injury to the spine or a lower extremity including all of the following: (1) patient lying on the floor, and (2) legs elevated.
	.5 apply appropriate measures in event of burns and scalds, including accidents by electric current	When asked in an approved written examination to identify the kinds of burns that can occur,	the candidate will identify (or select the answer identifies) the kinds of burns that can occur.	The candidate will identify (or select the answer that identifies) the following kinds of burns: thermal, chemical, electrical, respiratory and radiation.
		When asked in an approved written examination to describe the nature, severity and differentiating characteristics of first, second, and third degree burns,	the candidate will describe (or select the answer that describes) the nature, severity and differentiating characteristics of first, second, and third degree burns.	The candidate will describe (or select the answer that describes) first, second and third degree burns: (1) first degree – affects only outer epidermal area, characterized by redness, pain, increased warmth, or tenderness; (2) second degree – affects entire layer of epidermis, characterized by blistering, deep reddening, considerable swelling and severe pain; (3) third degree – affects epidermis and possibly muscle and bone, characterized by charring which may be black, brown, hard, cherry red and dry, milk white, or thick and leathery.

NAVIGATION AND VESSEL INSPECTION CIRCULAR NO. 5-00

Column 1  STCW Competence	Column 2  Knowledge, understanding and proficiency	Column 3  Performance Conditions	Column 4  Performance Behavior (Mariner knowledge or action)	Column 5  Performance Standard(s) (Criteria against which performance is measured)
		When asked in an approved written examination to identify the means of reducing the possibility of infection for burn victims,	the candidate will identify (or select the answer that identifies) the means of reducing the possibility of infection.	The candidate will identify (or select the answer that identifies) the following means of reducing the possibility of infection: (1) scrubbing hands before treating burn; (2) using sterile gloves; (3) cleansing area with water and povidone-iodine solution; (4) removing dirt and debris from <u>around</u> burn site; and (5) not opening blisters or removing pieces of tissue.
	.6 rescue and transport a casualty	When asked in an approved written examination when the victim <i>should not</i> be moved <i>prior</i> to evaluation and treatment,	the candidate will state (or select the statement that states) the circumstances when the victim <i>should not</i> be moved <i>prior</i> to evaluation and treatment.	The candidate will state (or select the answer that states) that the victim should not be moved prior to evaluation and treatment unless danger from fire, flooding, explosion and toxic substances, or any other immediate threat to life, requires movement from the area.
		When asked in an approved written examination to list the circumstances when a victim <i>should</i> be moved from the scene,	the candidate will list (or select the answer that lists) the circumstances when a victim <i>should</i> be moved from the scene.	The candidate will list (or select the answer that lists) the circumstances when a victim should be moved from the scene by indicating both of the following: (1) after suspected fractures have been immobilized and severe bleeding has been stopped; (2) movement is necessary due to an unsafe scene or in order to further treat the victim.
		Given a rescue mannequin or a volunteer patient, and given a variety of splints and ties, when asked to demonstrate the immobilization of a fracture,	the candidate will demonstrate the immobilization of a fracture named by the assessor using splints and ties on either the rescue mannequin or volunteer patient.	The candidate will in 10 minutes or less, correctly demonstrate the immobilization of the simple limb fracture named by the assessor using splints and ties on either the rescue mannequin or volunteer patient, achieving all of the following: (1) proper traction; (2) stability; and (3) padding.

**Assessment Guidelines for TABLE A-VI/1-3**  
**Specification for minimum standard of competency in Elementary First Aid**

Column 1  STCW Competence	Column 2  Knowledge, understanding and proficiency	Column 3  Performance Conditions	Column 4  Performance Behavior (Mariner knowledge or action)	Column 5  Performance Standard(s) (Criteria against which performance is measured)
		Given a rescue mannequin or a volunteer patient, when asked to demonstrate a log-roll,	the candidate, as team leader, will use a rescue mannequin or volunteer patient to demonstrate a logroll.	Using the rescue mannequin or volunteer patient, the candidate will, in 10 minutes or less, act as the team leader to correctly demonstrate a log-roll, doing all of the following: supporting the head; directing other rescuers to position themselves on the side of the patient; directing other rescuers hand placement on patient's shoulder, waist, hip, thigh, and legs; informing the other rescuers that on command, to roll the patient toward them, calling the command to "roll" while maintaining alignment of head with body; directing placement of spine board behind patient; and, calling the command for moving the patient onto spine board.
	.7 improvise bandages and use materials in first aid kit	Given a roller bandage, a triangular bandage, a tubular rolled bandage and a cravat, when asked to demonstrate bandaging techniques for wound treatment for each injury site indicated,	the candidate will select the appropriate bandage(s) and/or cravat, and demonstrate the bandaging technique for wound treatment for each injury site indicated.	The candidate will select the proper bandage(s) and/or cravat, and correctly demonstrate the bandaging technique for wound treatment that holds dressing securely in place, but does not interfere with circulation for 70% (3) of any 4 of the following injury sites (named by the assessor) in the time frame indicated: (1) forearm (5 minutes; uses roller bandage); (2) chest or back (10 minutes; uses triangular bandage); (3) shoulder or hip (10 minutes; uses cravat and triangular bandages); or (4) hand or foot (5 minutes; uses triangular bandage).

NAVIGATION AND VESSEL INSPECTION CIRCULAR NO. 5-00

<b>Column 1</b> <b>STCW</b> <b>Competence</b>	<b>Column 2</b> <b>Knowledge,</b> <b>understanding and</b> <b>proficiency</b>	<b>Column 3</b> <b>Performance Condition(s)</b>	<b>Column 4</b> <b>Performance Behavior</b> <b>(Mariner knowledge or action)</b>	<b>Column 5</b> <b>Performance Standard(s)</b> <b>(Criteria against which performance is measured)</b>
Comply with emergency procedures	Knowledge of types of emergencies which may occur	When asked to describe the types of emergencies which may occur,	the candidate will describe in writing the types of emergencies that may occur.	The candidate will correctly describe at least 70% (4) of the following emergencies: (1) collision, (2) fire, (3) foundering, (4) grounding and (5) weather related emergencies.
	Knowledge of emergency signals and specific duties allocated to crew members in the muster list; muster stations; correct use of personal safety equipment	When asked to state the location of station bills and forecastle card, and describe the information they contain,	the candidate will state in writing the location of station bills and forecastle card, and describe the information they contain.	The candidate will state the location of station bills and forecastle card, and describe all of the following information they contain: (1) fire alarm signal; (2) actions to be taken by crew and passengers upon hearing the general alarm; (3) abandon ship signal; and, (4) duties assigned to each member of the crew along with the location of their lifeboat station.
		When asked to state the purpose, location, and circumstances requiring lifejackets, exposure suits, hardhats, goggles, respirators, emergency escape breathing device, hearing protection, safety shoes and lumbar support belt,	the candidate will state in writing the purpose, location, and circumstances requiring lifejackets, exposure suits, hardhats, goggles, respirators, emergency escape breathing device, hearing protection, safety shoes and lumbar support belt.	The candidate will correctly state the purpose, location, and circumstances requiring lifejackets, exposure suits, hardhats, goggles, respirators, emergency escape breathing device, hearing protection, safety shoes and lumbar support belt.
	Knowledge of shipboard contingency plans for response to emergencies	When asked to list the steps to taken to report a fire,	the candidate will list in writing the steps to taken to report a fire.	The candidate will correctly list all of the following steps to be taken to report a fire: (1) pass word to an area where an alarm can be sounded i.e. bridge or engine room or sound the general alarm if available; (2) give all pertinent details concerning the fire location, type and size; and, (3) report actions taken so far.

**Assessment Guidelines for TABLE A-VI/1-4**  
**Specification for minimum standard of competency in Personal Safety and Social Responsibility**

<b>Column 1</b> <b>STCW</b> <b>Competence</b>	<b>Column 2</b> <b>Knowledge,</b> <b>understanding and</b> <b>proficiency</b>	<b>Column 3</b> <b>Performance Condition(s)</b>	<b>Column 4</b> <b>Performance Behavior</b> <b>(Mariner knowledge or action)</b>	<b>Column 5</b> <b>Performance Standard(s)</b> <b>(Criteria against which performance is</b> <b>measured)</b>
		When asked to list the steps to take upon seeing or hearing a person fall overboard,	the candidate will list in writing the steps to take upon seeing or hearing a person fall overboard.	The candidate will list all of the following actions to take upon seeing or hearing a person fall overboard: (1) shout "Man Overboard;" (2) throw a life ring; (3) notify the bridge as quickly as possible; and, (4) attempt to keep person in sight.
	Know actions to take on discovering potential emergencies, including fire, collision, foundering and ingress of water into the ship	When given a particular situation, and asked to identify the proper person to alert,	the candidate will identify in writing the proper person to alert for the situation given.	The candidate will correctly identify the proper person to alert for all of the following situations given: (1) fire; (2) collision; (3) foundering; and, (4) ingress of water into the ship.
	Know actions to take on hearing emergency alarm signals	When asked to list the actions to be taken upon hearing fire and abandon ship alarms,	the candidate will list in writing the actions to be taken upon hearing fire and abandon ship alarms.	The candidate will correctly list all of the following actions to be taken upon hearing a fire alarm: (1) follow directions on station bill by reporting to assigned emergency fire station; and (2) will, in 1 minute or less, correctly list all of the following actions to be taken upon hearing an abandon ship signal: (1) don appropriate clothing; (2) don PFD; (3) bring immersion suit; (4) perform assigned station bill duties prior to reporting to boat station; and, (5) report to boat station.

NAVIGATION AND VESSEL INSPECTION CIRCULAR NO. 5-00

<b>Column 1</b> <b>STCW</b> <b>Competence</b>	<b>Column 2</b> <b>Knowledge,</b> <b>understanding and</b> <b>proficiency</b>	<b>Column 3</b> <b>Performance Condition(s)</b>	<b>Column 4</b> <b>Performance Behavior</b> <b>(Mariner knowledge or action)</b>	<b>Column 5</b> <b>Performance Standard(s)</b> <b>(Criteria against which performance is measured)</b>
	Know value of training and drills.	When asked to list the reasons for requiring crew participation in training and drills,	the candidate will list in writing the reasons for requiring crew participation in training and drills.	The candidate will list at least 1 of the following reasons for requiring crew participation in training and drills: (1) prepares crew for any possible emergency; (2) repetition through drills allows for an immediate response to emergencies; (3) proper emergency procedures can save your life; or (4) all crew members rely on each other to carry out their assigned duties during emergency situations.
		When a shipboard communication device is named by the assessor and asked to describe its location and operation,	the candidate will describe in writing the location and operation of each shipboard communication device named by the assessor.	The candidate will, in 1 minutes or less for each device, describe the location and operation of all of the following shipboard communication devices named by the assessor: (1) internal phone system; (2) sound powered phone system; (3) intercoms; (4) voice tubes; and, (5) hand held radios.
		When a shipboard alarm system is named and then, asked to describe its location, purpose and actions to be taken for its alarm,	the candidate will describe in writing the locations, purpose and actions to be taken for each of the shipboard alarm systems named.	The candidate will, for each system, correctly describe the locations, purpose and actions to be taken when each of the following shipboard alarm systems is named by the assessor: (1) general alarms; (2) ship's whistle; (3) ship's bell; (4) CO <sub>2</sub> alarm; and, (5) engineer's call alarm.
Take precautions to prevent pollution of the marine environment	Know the effects of operational or accidental pollution of the marine environment.	When asked to describe the short and long term effects of pollution on water, the shoreline and marine life,	the candidate will in writing describe the short and long-term effects of pollution on water, the shoreline and marine life.	the candidate will correctly describe in writing the short and long-term effects of pollution on each of the following: water, shoreline and marine life.

**Assessment Guidelines for TABLE A-VI/1-4**  
**Specification for minimum standard of competency in Personal Safety and Social Responsibility**

<b>Column 1</b> <b>STCW</b> <b>Competence</b>	<b>Column 2</b> <b>Knowledge,</b> <b>understanding and</b> <b>proficiency</b>	<b>Column 3</b> <b>Performance Condition(s)</b>	<b>Column 4</b> <b>Performance Behavior</b> <b>(Mariner knowledge or action)</b>	<b>Column 5</b> <b>Performance Standard(s)</b> <b>(Criteria against which performance is measured)</b>
	Know the basic environmental protection procedures.	When asked to describe the important provisions of MARPOL, annexes 1 & 5,	the candidate will describe in writing the important provisions of MARPOL, annexes 1 & 5.	The candidate will correctly describe the important provisions of MARPOL, annexes 1 & 5 to include under what conditions and in what locations the discharge of oil, garbage and plastics is permissible; and, (2) the obligation to report oil spills.
		When asked to explain why operational procedures must be followed to safeguard the marine environment,	the candidate will explain in writing why operational procedures must be followed to safeguard the marine environment based on appropriate tenets of MARPOL.	The candidate will explain why operational procedures must be followed to safeguard the marine environment by stating one or more of the following concepts: (1) operational procedures reflect requirements of the law; (2) operational procedures reflect the analysis of how the ship systems need to operate to comply with the law; or (3) operational procedures are designed to take the “guess work” out of safeguarding the marine environment.
Observe safe working practices	Know the importance of adhering to safe working practices at all times.	When asked to describe areas or conditions aboard ship where injuries are common (frequent or more likely) and special attention to prevention is needed,	the candidate will describe in writing areas or conditions aboard ship where injuries are common (frequent or more likely) and special attention to prevention is needed.	The candidate will describe at least 5 of the following areas or conditions aboard ship where injuries are common (frequent or more likely) and special attention to prevention is needed: (1) slippery surfaces; (2) stairwells and ladders; (3) dimly lit areas; (4) areas of moving machinery; (5) mooring lines, and coiled lines or hoses; (6) electrical hazards; (7) hot surfaces; (8) areas of entrapment.



NAVIGATION AND VESSEL INSPECTION CIRCULAR NO. 5-00

<b>Column 1</b> <b>STCW</b> <b>Competence</b>	<b>Column 2</b> <b>Knowledge,</b> <b>understanding and</b> <b>proficiency</b>	<b>Column 3</b> <b>Performance Condition(s)</b>	<b>Column 4</b> <b>Performance Behavior</b> <b>(Mariner knowledge or action)</b>	<b>Column 5</b> <b>Performance Standard(s)</b> <b>(Criteria against which performance is measured)</b>
		When asked to describe common safety practices for shipboard work,	the candidate will describe in writing common safety practices for shipboard work.	The candidate will correctly describe all 3 common safety practices for shipboard work: (1) “one hand for me and one for the ship”; (2) proper lifting techniques; and, (3) get help when needed.
	Know precautions to be taken prior to entering enclosed spaces.	When asked to define an “enclosed space” and describe the dangers associated with enclosed spaces,	the candidate will define in writing an “enclosed space” and describe the dangers associated with enclosed spaces.	The candidate will correctly define an “enclosed space” and describe at least 2 of the following dangers associated with enclosed spaces: (1) lack of oxygen; (2) dangerous gases, fumes and vapors; (3) lack of lighting; (4) limited access; (5) poor lighting; and (6) poor footing.
		When asked to list procedures to take prior to entry into an enclosed space,	the candidate will list in writing procedures to take prior to entry into an enclosed space.	The candidate will correctly list all of the following procedures to take prior to entry into an enclosed space: (1) open and ventilate space; (2) test atmosphere; (3) obtain entry approval; (4) have available and use proper entry equipment; and, (5) continue to monitor atmosphere and entry personnel.
	Familiarization with international measures concerning accident prevention and occupational health.	When asked to identify dangerous conditions, safety hazards or other non-conformities,	the candidate will identify in writing dangerous conditions, safety hazards or other non-conformities as noted in applicable national or international standards.	The candidate will correctly identify dangerous conditions, safety hazards or other non-conformities.
Understand orders and be understood in relation to shipboard duties	Ability to understand orders and to communicate with others in relation to shipboard duties.	When asked to describe the importance of understanding and obeying orders and communicating with others in carrying out their shipboard duties,	the candidate will describe in writing the importance of understanding and obeying orders and communicating with others in carrying out their shipboard duties.	The candidate will describe the importance of understanding and obeying orders and communicating with others in carrying out their shipboard duties.

**Assessment Guidelines for TABLE A-VI/1-4**  
**Specification for minimum standard of competency in Personal Safety and Social Responsibility**

<b>Column 1</b> <b>STCW</b> <b>Competence</b>	<b>Column 2</b> <b>Knowledge,</b> <b>understanding and</b> <b>proficiency</b>	<b>Column 3</b> <b>Performance Condition(s)</b>	<b>Column 4</b> <b>Performance Behavior</b> <b>(Mariner knowledge or action)</b>	<b>Column 5</b> <b>Performance Standard(s)</b> <b>(Criteria against which performance is</b> <b>measured)</b>
		When asked to explain the necessity to learn and use proper shipboard terminology and technical terms as soon as possible,	the candidate will explain in writing the necessity to learn and use proper shipboard terminology and technical terms as soon as possible.	The candidate will explain the necessity to learn and use proper shipboard terminology and technical terms as soon as possible by listing at least 1 of the following reasons: (1) shipboard terminology is cultural; (2) shipboard terminology provides a uniform and most commonly understood means of communication; (3) most shipboard tasks and operations are either large or complex and thus, involve coordination and communication with other departments or people; or, (4) other similar concepts.
		When asked to explain the need for effective communication skills aboard ship,	the candidate will explain in writing the need for effective communication skills aboard ship.	The candidate will explain the need for effective communication skills aboard ship by discussing any of the following points: (1) ship operations are complex and require the coordinated action of many crew members; (2) ship systems are complex and require precise communication to operate and maintain; and, (3) emergency situations require fast, precise communication for lives and the vessel to be saved.

NAVIGATION AND VESSEL INSPECTION CIRCULAR NO. 5-00

<b>Column 1</b> <b>STCW</b> <b>Competence</b>	<b>Column 2</b> <b>Knowledge,</b> <b>understanding and</b> <b>proficiency</b>	<b>Column 3</b> <b>Performance Condition(s)</b>	<b>Column 4</b> <b>Performance Behavior</b> <b>(Mariner knowledge or action)</b>	<b>Column 5</b> <b>Performance Standard(s)</b> <b>(Criteria against which performance is measured)</b>
Contribute to effective human relationships on board ship	Know the importance of maintaining good human and working relationships aboard ship.	When asked to describe why cooperation is necessary, and why interpersonal problems should be reported before they escalate,	the candidate will describe in writing why cooperation is necessary, and why interpersonal problems should be reported before they escalate.	The candidate will describe why cooperation is necessary, and why interpersonal problems should be reported before they escalate by stating any of the following concepts as: (1) harmony and teamwork are essential to crew effectiveness; (2) good interpersonal relations foster teamwork and harmony; (3) the unique circumstances of operational stress and being confined to a vessel make good interpersonal relationships vital; (4) seeking help is one of the most effective means toward resolving interpersonal problems.
		When asked to state the circumstances when harassment against another person is permitted,	the candidate will state in writing the circumstances when harassment against another person is permitted.	The candidate will state that there are no circumstances when harassment against another person is permitted.
		When asked to give examples of verbal, physical and sexual harassment,	the candidate will give in writing examples of verbal, physical and sexual harassment.	The candidate will give at least one example each for verbal, physical and sexual harassment.
		When asked to describe the necessity of following orders to ensure the safe and productive operation of the vessel,	the candidate will describe in writing the necessity of following orders to ensure the safe and productive operation of the vessel.	The candidate will describe the necessity of following orders to ensure the safe and productive operation of the vessel by stating at least 1 reason similar to the following: (1) the master of the vessel and crew will assume that the order is being complied with as they continue to operate the vessel; (2) orders reflect the individual's role in the larger, more complex operation of the ship; (3) when an order is given, others depend on its successful and prompt completion in order to carry out their duties.

**Assessment Guidelines for TABLE A-VI/1-4**  
**Specification for minimum standard of competency in Personal Safety and Social Responsibility**

<b>Column 1</b> <b>STCW</b> <b>Competence</b>	<b>Column 2</b> <b>Knowledge,</b> <b>understanding and</b> <b>proficiency</b>	<b>Column 3</b> <b>Performance Condition(s)</b>	<b>Column 4</b> <b>Performance Behavior</b> <b>(Mariner knowledge or action)</b>	<b>Column 5</b> <b>Performance Standard(s)</b> <b>(Criteria against which performance is</b> <b>measured)</b>
	Understand social responsibilities; employment conditions; individual rights and obligations; dangers of drug and alcohol abuse.	When asked to name organizations the seafarer has the right to report situations concerning harassment, unfair practices, or unsafe conditions,	the candidate will name in writing organizations the seafarer has the right to report situations concerning harassment, unfair practices, or unsafe conditions.	The candidate will name at least one of the following organizations the seafarer has the right to report situations concerning harassment, unfair practices, or unsafe conditions: (1) appropriate federal agencies; (2) union representatives; or (3) company officials.
		When asked if performing assigned duties while under the influence of alcohol or illicit drugs is a violation of federal law and why,	the candidate will state in writing whether performing assigned duties while under the influence of alcohol or illicit drugs is a violation of federal law and explain why.	The candidate will state that performing assigned duties while under the influence of alcohol or illicit drugs is a violation of federal law because these chemicals severely impair judgment, speech and emotional stability.

\* These competencies are knowledge based. The assessment of the required knowledge may be a written multiple-choice examination. The student must achieve a minimum-passing grade of 80%.